



COMDTPUB P6100.13

22 SEP 1994

COMMANDANT PUBLICATION P6100.13

Subj: NUTRITION AND WEIGHT CONTROL PAMPHLET

1. PURPOSE. This publication provides nutritional and weight control guidance for all Coast Guard members and beneficiaries to be used in conjunction with the Coast Guard wellness program.
2. DISCUSSION. All Coast Guard members and beneficiaries are encouraged to contact their district wellness coordinator, unit wellness program specialist, or local Coast Guard health care facility for more specific information and direction on the use of this pamphlet.
3. REQUESTS FOR CHANGE. All Coast Guard units, members, and beneficiaries may recommend changes in writing via the chain of command to Commandant (G-KOM-3), U.S. Coast Guard, Washington, DC 20593-0001.
4. FORMS AVAILABILITY. This pamphlet is available from all district wellness coordinators, unit wellness program specialists, and Coast Guard health care facilities. Changes to this pamphlet will be distributed as changes occur. This COMDTPUB may be reproduced locally.

ALAN M. STEINMAN
Chief, Office of Health and Safety

Encl: (1) Losing Body Fat the Easy Way

DISTRIBUTION - SDL No. 132

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	1	2	2		2	2				
B		12	20*	2	20	10		20	5	5	5	10	5	20	5	2	10	15	5	10	5	5	20	5	5	2
C	5	3	2	5	2	2		1	1	1	9	1	1		2	1	2	5		1	1	1	1		1	1
D	9	5	1	5	1	1	1	5		1	1	1			1	1	1					1	1	1		1
E	2						1	1		1	1	1			1	1		1	1		1	1	1	1		
F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1		
G	1	1																								
H																										

NON-STANDARD DISTRIBUTION: B:c MLCs (6 extra)

LOSING BODY FAT THE EASY WAY

LOSING BODY FAT THE EASY WAY

TABLE OF CONTENTS

CHAPTER 1.	INTRODUCTION.....	1
CHAPTER 2.	GETTING STARTED.....	3
CHAPTER 3.	FOOD TABLE.....	6
CHAPTER 4.	MEAL PLANNING.....	8
CHAPTER 5.	FAST FOOD TRAPS.....	11
CHAPTER 6.	STRENGTH TRAINING FOR WEIGHT AND FAT LOSS.....	13
CHAPTER 7.	AN EXERCISE PRESCRIPTION FOR LOSING BODY FAT, PART I.....	16
CHAPTER 8.	AN EXERCISE PRESCRIPTION FOR LOSING BODY FAT, PART II.....	19
CHAPTER 9.	AN EXERCISE PRESCRIPTION FOR LOSING BODY FAT, PART III.....	22
CHAPTER 10.	SUMMARY.....	25

CHAPTER 1. INTRODUCTION

So, you've finally decided to get serious about losing weight, eh? Well, so have a whole lot of other people in the U.S. In fact, so strong is this impulse in our culture that an entire industry has evolved to "assist" you in losing weight. Unfortunately, what you mostly lose is your money. Although you may temporarily lose some weight, studies show that the majority of people who subscribe to various fad diets, patronize weight loss clinics, purchase expensive diet foods or spend time (and a whole lot of money) at "fat farms," invariably regain most of their lost weight when they return to real life. And then they do it all over again the next year. This type of "yo-yo" dieting is not only ineffective, it actually hurts you. Each time you cycle the yo-yo, losing weight and gaining it back again, you make it harder the next time to succeed. "Yo-yo" dieting slows down your metabolism, meaning you burn fewer calories throughout the day than you did before you bought into the "yo-yo" syndrome.

It doesn't have to be that way. The goal is to permanently lose excess body fat. But to do this, you have to be willing to alter your life-style. NOTHING ELSE WILL WORK! And although this sounds ominous (yes, you will have to learn how to eat different things and exercise more), it's really pretty simple and relatively painless. It only requires commitment on your part and a realization that it is going to take time, maybe even as long as a year to get where you want to be. But since it took you until now to get fatter than you'd like (or in some cases, fatter than regulations allow), and since you have to make a lifelong commitment to change your life-style in order to succeed, what's the hurry? In fact, if you adopt healthy food and exercise habits, you won't need to "diet" at all. In essence, if you habitually eat a low-fat, balanced diet and if you habitually participate in aerobic exercise with a little added weight training, you will steadily lose body fat without the need for "magic" foods, starvation diets, food deprivation, or any of the other extremes that weight-loss diets often prescribe. It'll all happen automatically.

Now, here's the most important thing you need to know about losing weight: Your primary objective is to LOSE BODY FAT, not simply to lose pounds. At the same time, you want to maintain or even increase your lean body mass: You don't want to lose your hard-earned muscles while you're losing fat. If you gauge your success solely by what your scale shows, you're making a big mistake. From the standpoints of both health and what you see in the mirror, your weight is not nearly as important as is how fat you are. The scale, of course, shows your total weight, which basically consists of fat plus lean body mass (e.g., muscle, blood, bone, skin, organs, etc.). Water is by far the largest

component of both your total weight and your lean body mass (60 percent and 75 percent, respectively). So most of your daily (or even weekly) changes in total body weight, and, therefore in what your scale shows, is really nothing more than changes in the water content of your body.

Water is not what you want to lose; fat is what you want to lose. So relying on your scale to show you how much fat you've lost is highly inaccurate. Worse, thinking you've really accomplished something because you weigh two pounds less after a vigorous workout is silly. What you've lost is 99.5 percent sweat (i.e., water) not fat. It takes quite a while to lose fat; it's not something you can measure or even notice over the course of a few days. Losing body fat rather than body-water is what your goal should be. For men, any body fat over 20 percent is too much, and a body fat over 25 percent is obesity. For women, the corresponding figures are 30 percent and 35 percent. For comparison, the upper limit of acceptable body fat for male U.S. Marines is 18 percent; most male world-class marathon runners have body fat under 10 percent; professional football defensive and offensive backs are at about 10-12 percent (with linemen at 14-18 percent). World-class female distance runners have about 10-12 percent body fat (but for women, body fat this low usually are associated with loss of menstrual periods, which increases the risk of osteoporosis). Unfortunately, body fat seems to increase with age, and some of this body fat is deposited internally (particularly in the gut for men and the hips for women), rather than under the skin where you can see it. The figures above are for men and women between 20-45 years of age.

CHAPTER 2. GETTING STARTED

There is no quick way to lose body fat, but there is a safe and effective way: (a) simply decrease the number of fat calories you eat; (b) don't replace them with calories of sugar, starch and protein; and (c) perform some type of exercise every day. That's all there is to it. As you can see, it boils down to the old equation: if you burn up more calories than you take in, you'll lose fat. To accomplish this, however, you need to learn a few things about food and exercise. So, let's start with food.

FOOD. Calories basically come from three sources: protein, carbohydrate (sugar and starch), and fat. Protein is essential for building muscle, making antibodies, repairing damaged tissue, and a host of other vital functions. Protein calories come from meat, poultry, fish, dairy products, grains, beans, and nuts. Carbohydrates are the primary energy source for every cell in the body. Carbohydrate calories come from the sugars and starches found in fruits and vegetables, milk, grains, beans and nuts. Fat deposits in the body are a reserve energy source and provide insulation against the cold. Fat calories in foods come from oils, butter and margarine, mayonnaise, breakfast meats (bacon, sausage, ham, etc.), beef, pork, veal, egg yolks, dairy products (except skim milk), cold cuts, nuts (including peanut butter, which is 80 percent fat), poultry skin, coconuts, avocados, and olives. A Gram is the basic measure of food weight; there are 28.35 grams in each ounce, and 454 grams per pound. Each gram of protein and each gram of carbohydrate provides 4 calories of food energy. But, each gram of fat provides 9 calories! (I'm telling you all this because you should get used to reading food labels and calculating the percentage of your total calories coming from fat.) So if you're going to cut down your food calories, you obviously get more bang for your effort by restricting fat calories. Furthermore, recent studies show that not all calories are equal in making body fat. Fat calories are more efficient at increasing your body fat than are protein and carbohydrate calories, which is all the more reason to restrict your fat intake. Conversely, limiting fat calories is more effective in losing body fat than is limiting protein or carbohydrate calories. From the above you can see that one pound of body fat equals about 4,000 calories (454 grams x 9 calories per gram). Ultimately, if you ingest 4,000 fewer calories (particularly from fat) than you expend over the long run, you'll lose a pound of body fat. The body's physiology and chemistry aren't nearly this simple, but it's a pretty good approximation.

If you're like most Americans, you eat 35-40 percent of your total calories as fat. That's too much! The American Heart Association recommends you eat no more than 30 percent of your total calories as fat. This will not only help you lose body

fat, but it will also help lower your cholesterol. So, if you're like most people, you have a lot of room in your diet to reduce your fat intake. The more fat you eliminate from your diet, the faster you will lose body fat. Actually, even 30 percent of your calories from fat is too much--remember, that's the maximum recommended fat intake. If you want to lose body fat, you need to eat much less fat than this.

The easiest way to reduce unnecessary fat calories is to stop using fat as a spice. Fat as a spice?! Yes, many people use fat to change the taste (or texture) of other foods, just as they do salt, pepper, or other spices. What else do you call it when you slather butter or margarine on toast or vegetables, or when you spread these fats, mayonnaise (which is 98 percent fat) or cream cheese (90 percent fat) on sandwiches? One tablespoon of butter, margarine, or mayonnaise contains 60-100 calories of fat. The same is true of sour cream (90 percent fat).

If you simply stopped using these fats as spices, you could save several hundred calories per day, and many thousands of calories per month, just by this one simple alteration in your diet! Instead of butter or margarine on toast, eat it dry or use jelly, apple butter, or any other nonfat topping. Instead of mayonnaise on your sandwiches, or as a binder in tuna salad or chicken salad, use fat-free mayonnaise (it tastes the same) or yogurt with your favorite spices. Instead of butter or margarine on vegetables, use any other spice (and there are dozens available on the shelves of your supermarket--even salt-free spices and flavorings). For example, consider a baked potato. A large, plain baked potato is an excellent food--100-125 calories, nearly all carbohydrate, virtually no fat, and a good source of vitamins and minerals. But most people find it pretty bland, so they like to spice it up (i.e., change its taste) by adding things like butter, sour cream, bacon bits, or even all three together. When you glomp on these fats, you convert the innocent, healthy, fat-free baked potato into a 400-500 calorie FAT-BOMB! Instead of spicing the baked potato with fat, try vinegar, lemon juice, catsup, soy sauce, teriyaki sauce, nonfat salad dressings (fat-free ranch dressing with sprinkled dill is particularly tasty), or any other low-fat, low-calorie flavoring of your choice. Another relatively simple way to reduce your fat intake is to switch from regular milk (49 percent fat) or 2 percent milk (35 percent of total calories from fat) to 1 percent milk (24 percent fat) or skim milk (0 percent fat). If you drink two or three glasses of milk per day, you again can save several hundred calories with this simple change. One cup of regular milk contains about 9 grams of fat--about 81 fat calories out of a total of 166; one cup of 2 percent milk has about 5 grams of fat--about 45 fat calories out of a total of 130; one cup of 1 percent milk has about 2.7 grams of fat--24 fat calories out of a

total of 100; and one cup of skim milk has no fat at all!--zero fat calories out of a total of 85. So by switching from regular milk to skim milk, you save 81 total calories (all fat) per cup.

But, what's that you say? You like the taste of butter or margarine on your food, and you think skim milk tastes like cloudy water? Well, that's the heart of the problem: If you're too fat, you got that way because of your life-style, which includes the foods you currently LIKE to eat. It's really not all that hard to get to like a different set of foods, foods that will be kinder to your waistline and hips. For example, if you wanted to "beef-up" the appearance and taste of skim milk, add some condensed skim milk (available in cans). You'll be adding only a few extra calories of protein and carbohydrate, but no additional fat calories.

To lose body fat successfully, that is, to lose it and keep it lost, you have to change what you like to eat. This is an essential part of the commitment to changing your life-style. If you don't do it, you will never get rid of your extra fat. Consider this, if you simply ate 500 fewer fat calories per day (that's five tablespoons of butter or margarine), you could probably lose one pound per week of fat (and probably more than one pound per week of total weight). It's easy to do.

CHAPTER 3. FOOD TABLE

To lose body fat successfully, that is, to lose it and keep it lost, you have to change what you like to eat. This is an essential part of the commitment to changing your lifestyle. If you don't do it, you will never get rid of your extra fat. Consider this, if you simply ate 500 fewer fat calories per day (that's five tablespoons of butter or margarine), you could lose one pound per week of fat (and more than one pound per week of total weight). It's easy to do. Here's a list of foods that are notoriously high in fat (and some, by comparison, which are low in fat), many of which are good targets for reduction or elimination from your diet:

FOOD	% CALORIES FROM FAT	FOOD	% CALORIES FROM FAT
Salad Dressings		Chicken, white w/skin	45
Blue Cheese	100	Chicken, white w/o skin	25
French	90-100	Egg white	0
Italian	90-100	Egg yolk	75
Mayonnaise (real)	90-100	Ham, roast	46
Ranch	90-100	Lamb, loin chop (trim fat)	36
Thousand Island	75-95	Pork chop, cntr cut lean	41
(changing to fat-free reduced this to 0%)		Tuna in oil	37
		Tuna in water	5
Fruits and Veggies		Milk Products	
Avocado	92	Butter	100
Banana	5	Cheese, cheddar	78
Carrot	3	Cheese, cream	90
Orange (1 med Navel)	1	Cheese, Swiss	77
Olives	90	Ice Cream, prem. van.	61
Potato, baked with skin	<1	Ice Cream bar (w/milk choco)	63
Squash, raw (all kinds)	7	Ice Milk	27
		Sherbert, (all flavors)	13
Sandwich Meats (per slice)		Sour Cream	90
Bologna, beef	83	Whipping Cream	100
Bologna, turkey	71	Yogurt, low-fat w/fruit	11
Frankfurters, beef	81	Yogurt, frozen vanilla	21
Frankfurters, chicken	68		
Ham (5 lean)	34	Nuts	
Salami, beef	73	All dry roasted types 1 oz	85
Salami, turkey	64	Coconut	81
		Peanut Butter	76
Meats, Eggs, Fish		Snacks (1 oz)	
Bacon	80	Popcorn, microwave	39
Beef, ground, patty	60	air-popped no butter	0
Beef, ground lean, broiled	57	Corn Chips	48
Beef, top round, broiled	29	Potato Chips	61
Breakfast sausage	79	Pretzels	10

Note: This list doesn't give you total calories, which vary with the amount eaten.

Using this list can help you lose body fat. For example, note the difference between ice cream, sherbet, and frozen yogurt. Consider the difference in fat intake if you made omelets or scrambled eggs using one whole egg and two egg whites instead of

three whole eggs. Or look at the percentage of fat you get when you eat bacon or sausage and eggs for breakfast. Why not cereal, fruit and skim milk? Look at the tuna fish. Packed in water, an entire can has only about 180 calories of high quality protein. Packed in oil, the calories more than double. Then, if you mix it with mayonnaise (adding fat for flavor and texture) to make a tuna-salad sandwich, you add a significant amount of calories to what would otherwise be a low-fat, low-calorie food.

Now look at the cheese and nuts on this list. These foods, popular for both snacking and condiments, provide a large fat-calorie load. Interestingly, both nuts and cheese enjoy a reputation as "health" foods (helped, in part, by advertising from dairy producers). But the high fat content of nearly all cheese, even those that advertise themselves as "part-skim," makes them particularly unhelpful for people who are trying to lose body-fat. Since most cheeses have over 75 percent of their total calories in fat (cottage cheese is the notable exception, especially low-fat (1 percent) or nonfat cottage cheese), they are far from "health" foods. Eaten in moderation, cheese can be part of a healthy diet; but its high saturated fat (i.e. butterfat) content makes cheese unhealthful for those concerned about heart disease or their waistline.

Our list of high fat foods also shows that potato chips (and corn chips too) are high in fat. Imagine, then, what nachos do for you? The combination of corn chips and melted cheese yields a veritable hog's heaven of fat calories--one typical serving of nachos contains 570 calories, of which 55 percent are fat! Or how about a typical sour cream onion dip eaten with potato chips or corn chips? Since the sour cream itself is 90 percent fat, each dipped chip gives you about 15 calories, 83 percent of which is fat. Can you eat just one? If you ate 20 of them, you'd get 250-300 total calories and 200-250 fat calories. This is the equivalent of eating 2-3 tablespoons of butter or margarine. Instead of potato chips, why not use plain Rye-Krisp crackers (virtually fat-free) in an onion dip made with mock sour cream (low-fat cottage cheese in a blender with a little lemon juice and a package of dry onion soup--or else use nonfat sour cream, which is now available in many supermarkets). Now you have a very low-fat, high protein snack instead of high-fat blobbola.

CHAPTER 4. MEAL PLANNING

One of the most important meals during the day is breakfast, and it's also a meal where many people get lots of their daily fat calories. So, here's what you need to do. Avoid the usual bacon, sausage, and eggs--all are very high in fat. Also, don't spread butter or margarine on your toast--use jelly or apple butter instead. Cereals, either hot or cold, are your best bet, particularly if you add fresh fruit or raisins and if you use skim milk (or 1 percent milk). Again, if you don't currently like skim milk, I guarantee you'll get used to it after a few days. Otherwise, use condensed skim milk; it has the consistency and appearance of cream, but it is just concentrated skim milk. Add it to your normal skim milk to give it more "body." Also you can use condensed skim milk as a "whitener" in your coffee instead of half-&-half or non-dairy creamer (both of which are very high in fat content). The condensed skim milk, which comes in cans, has no fat at all.

Pancakes, waffles, and French toast made with egg whites or egg substitute are okay, so long as you don't slather them with butter or margarine. Just use plain syrup, jelly, or honey (in moderation, of course). What about omelettes and scrambled eggs? Although this may sound weird, make your omelettes and scrambled eggs using only egg whites (or 2-3 egg whites for each whole egg). Egg whites have zero fat and contain the highest quality protein you can eat. Aside from their color, the taste of the omelette or scrambled eggs is virtually the same, particularly if you add mushrooms, green peppers, bits of ham, onions, or whatever (notice I didn't say cheese). Another way to make omelettes is with artificial eggs (e.g., Egg Beaters, etc.). These are usually just egg whites with some coloration to make them look yellow--the taste is about the same as for regular eggs. In any event, they have zero fat. Or finally, you can use two egg whites and one whole egg. One more thing about breakfast: avoid croissants (45 percent fat), doughnuts (50-60 percent fat), and beignets (50 percent fat). Other sweet rolls and pastries are nearly as bad. Bagels are totally nonfat, as is toast without butter or margarine. If you want a dramatic demonstration on how much fat doughnuts contain, microwave one on a paper towel and watch what happens. You'll be amazed at how much oil comes bubbling out of that innocent appearing morsel! Commercial muffins are nearly always loaded with fat, so avoid them. Best for you is to make your own muffins using a low-fat recipe.

Here is something good about breakfast pastries: there are now nonfat pastries and cakes available in supermarkets that are fairly tasty. These truly have no fat, but they are high in calories and sugar, so eat them in moderation--and watch out for the serving size listed on the box. The portion listed is usually unrealistically small, meaning you'll probably eat a larger piece and, therefore, eat more calories than intended (unless you stick strictly to the serving size mentioned).

LOW-FAT COOKING TECHNIQUES:

Non-stick pots and pans enable you to use little or no added fat to brown meats, saute vegetables, reheat leftovers, and make golden brown, low-fat pancakes and omelets.

Instead of using that leftover bacon grease (which you shouldn't be eating anyway, either from the standpoint of a low-fat diet or from the standpoint of health!) or dollop of oil in your cooking, try the end of a stick of reduced calorie (diet) margarine or a pastry brush dipped in oil to smear on a light coating of fat. Or else, if you really need oil, spritz on a light coat of a vegetable oil spray.

Experiment with nonfat liquids, such as worchestershire sauce to saute mushrooms, chicken broth, or tomato juice to prepare vegetables or to poach poultry and fish.

Trim off all visible fat from meat and remove the skin from chicken before you cook it.

Broil meats, poultry, and fish instead of frying them. For stewing or soups, cook the meat ahead of time, let cool and skim off the accumulated fat before you go on.

In most recipes and dishes calling for sour cream, substitute plain low-fat yogurt or nonfat sour cream. You can also substitute skim milk for whole milk, condensed skim milk for regular evaporated milk.

Many no-oil ("free") dressings are now available to dress up salads, including mayonnaise for low-fat potato or macaroni salad. These dressings are tasty, and they truly are nonfat.

THE TRUTH ABOUT "PART-SKIM" CHEESES:

Ricotta and mozzarella are the most common part-skim cheeses, but are they low in fat? NO! Both are made from whole and skim milk. Look at the figures:

	<u>Calories</u>	<u>Fat(g)</u>	<u>% Calories from Fat</u>
Mozzarella, whole milk, 1 oz.	80	6	68
Mozzarella, part-skim, 1 oz.	72	4.5	56
Ricotta, whole milk, ½ cup	216	16	67
Ricotta, part-skim, ½ cup	171	10	53

You save a few calories and grams of fat with part-skim cheeses, however they are far from being low-fat choices. To be truly low-fat, a cheese must have 3 grams of fat or less. That doesn't mean you can never use them. Small amounts of even the whole milk versions can be used with pasta and tomato sauce to yield a dish acceptably low in fat. Remember: The fat content of your whole meal (and of the whole day) is what's important, not just the content of one dish or ingredient. Check the label of any cheese marked "part-skim," "low-fat," or "reduced fat" so you can decide for yourself.

CHAPTER 5. FAST FOOD TRAPS

Fast-food is usually fat food! Fast-food restaurants are notorious for high-fat, high calorie items. Obviously, if you're trying to lose fat, meals at these places are not in your best interest. The following table shows you why.

Type	Total Cals	% Fat Cals	Type	Total Cals	%Fat Cals
<u>McDonald's</u>			Thin Pepperoni Pizza	430	36
Hamburger	250	36	<u>Wendy's</u>		
Quarter Pounder	414	46	Hamburger	350	41
McLean Deluxe	320	28	Big Classic	470	48
(w/cheese)	370	34	Chicken Breast Sandwich	340	69
Big Mac	562	51			
Egg McMuffin	340	42	<u>Arby's</u>		
Chicken McNuggets	323	59	Sausage/egg croissant	500	58
			Roast Beef King	467	37
<u>Burger King</u>			Superstuff potato dlx.	648	53
Breakfast Croissanwich	304	56			
Hamburger	275	39	<u>Kentucky Fried Chicken</u>		
Whopper with cheese	711	54	Brst, side, extra crsp	354	60
Whopper	628	52	Breast, orig. recipe	257	48
Chicken Tenders	204	44	Chicken Nuggets (ea.)	46	57
<u>Taco Bell</u>			<u>Roy Rogers</u>		
Taco	184	54	Bacon Cheeseburger	552	54
Burrito Supreme	422	41	Fried Chicken Breast	412	52
Taco Salad w/ranch	1167	67			
Nachos Bellgrande	649	49	<u>Long John Silvers</u>		
			Fish and Fries 3 pcs.	853	51
<u>Pizza Hut</u>			Seafood platter	976	53
Thick Pizza Supreme	640	31	Seafood salad w/crker	406	67

Actually, many fast food restaurants are responding to the public's demand for low-fat items by serving new nonfat and low-fat selections. McDonald's offers an apple muffin which has no fat, and they offer a low-fat salad (chicken breast on a bed of lettuce) which is also quite low in fat. The McDonald's Chef Salad is not low-fat because of its use of cheese and ham.

Many fast-food restaurants have salad bars which typically have many low-fat and no-fat items available (e.g., any plain vegetable or fruit). Items to avoid on a salad bar (if you want to avoid the high-fat foods) are: shredded cheese, potato and macaroni salads (both usually made with mayonnaise), olives, avocado, deviled or diced eggs (because of the yolks), anything marinated or soaking in oil (e.g., three bean salad, artichoke hearts, mushrooms, etc.), and tuna in oil.

Watch out for the salad dressings. Most salad dressings are nearly 100 percent fat, and worse, most salad bars like to use ladles that deliver 2-3 tablespoons of dressing. Each tablespoon of salad dressing is about 100 calories, so if you put a couple of ladles of salad dressing on your salad, you've added about

400-600 calories of fat to your otherwise healthy salad! Most people don't realize this fact--although you might think you've done your body a favor by eating from the salad bar. (In fact, even a huge plate of lettuce, tomatoes, cauliflower, broccoli, carrots, etc., usually is less than 150 calories. By adding 2 ladles of salad dressing, you're adding 400-600 fat calories to your diet.) Do you only use two ladles? I've seen some people use three and four ladles! These folks are adding nearly 1,000 calories, or more, to their innocent plate of veggies!

The same is true for most of the packaged salad dressings provided by McDonald's and other fast-food restaurants (each package provides about 400 calories of dressing, nearly all of it fat). If you're on a low-fat diet, this is obviously a disaster. Hopefully, the salad bar has low-fat or nonfat dressings available, which typically have less than 100 calories per ladle. (McDonald's has a low-fat packaged Italian dressing.) If low-fat or nonfat dressings are unavailable, use vinegar, lemon juice, or just plain salt and pepper to season your salad. None of these alternatives have any fat. You can also use small amounts of the regular salad dressings and simply mix it well into your salad.

Most salad dressings spread very well, so by tossing your salad with a small amount of dressing, you can flavor it with the dressing while avoiding most of the fat.

CHAPTER 6. STRENGTH TRAINING FOR WEIGHT AND FAT LOSS

Strength training can help you burn fat and help you lose weight. Research shows that a little weight lifting is valuable, just like aerobic exercise, in burning up calories. And the amount of exercise necessary to achieve this is far less than you'd need to build big muscles. Many people who want to lose body fat shy away from weight lifting because they're afraid they'll put on weight as muscle, and their scale will show they're not succeeding as fast as they'd like with their weight-loss program. But, as any bodybuilder or weight lifter will tell you, it takes a long time and a tremendous amount of hard work to put on noticeable muscle mass--like 1 plus hours/day of hard lifting, 6 days a week for many months and years! So, a little weight lifting to assist your fat-loss program is not going to turn you into Hulk Hogan. Furthermore, it will prevent you from losing muscle, which happens all too often when people try to lose weight. Remember, losing fat is what you want from a diet, not losing muscle.

Here's how strength training helps in losing weight. First, you burn calories, just as in aerobic exercise. You don't burn a whole lot, however, something on the order of 2.6 calories per pound of body weight per hour of lifting. [This is assuming you do 1 set of lifts every 2 minutes (e.g., 1 minute of lifting, 1 minute of rest) to as much as 5 calories per pound of weight per hour for circuit weight training (e.g., 30 seconds of lifting and 15 seconds of rest).]

The second effect of strength training on weight loss comes from increasing the amount of your muscle mass. Compared to most of the cells in your body, muscle cells are pretty intense; they're very metabolically active. That means that even when they're resting, muscle cells burn calories more than 300 times faster than do fat cells. (Fat cells are pretty lazy creatures, with a metabolic rate so low they're barely awake.) So, the more muscle you have, the higher your metabolic rate, and the faster you burn calories--even when you're lying down. Actually, there's a scientific term to describe the rate at which you burn up calories at rest--your basal metabolic rate, or BMR. Your BMR is the amount of energy required to keep you alive, to run all your body's vital functions at a minimal level. Your BMR is your most important ally in losing body fat and weight, because, like an engine constantly running at idle, your BMR is always burning calories. It accounts for far more calories burned, every day, than does exercise for most people. (People who burn more exercise calories than their BMR don't have to worry about body-fat like marathon runners, triathletes, etc.) Your BMR depends

on your age, sex, size, heredity, and body composition (e.g., percent of body fat and muscle mass). As a rough estimate, your BMR is about 10-12 calories per pound of body weight per day. People with high levels of muscle have high BMRs and burn up more calories even when they're just lounging around than do people with a smaller percent muscle mass. So, to the extent strength training gives you more muscle mass, you raise your BMR and silently and continuously burn up calories.

CALORIES BURNED PER MINUTE

Physical Activity	110 lb.	130 lb.	150 lb.	170 lb.	190 lb.	210 lb.
Circuit Weight Training	9.3	10.9	12.6	14.2	15.9	17.7
Cycling (5.5 mph)	3.2	3.8	4.4	4.9	5.5	6.1
Cycling (9.4 mph)	5.0	5.9	6.8	7.7	8.6	9.5
Cycling (13 mph)	7.8	9.2	10.7	12.1	13.5	14.9
Cycling (15 mph)	8.5	10.1	11.5	13.1	14.5	16.2
Driving a Car	2.2	2.6	3.0	3.4	3.8	4.2
Eating	1.2	1.4	1.6	1.8	2.0	2.2
Golf (no-cart, carrying clubs)	5.0	5.9	6.8	7.7	8.6	9.5
Jumping Rope (70 jumps/min)	7.2	9.2	10.7	12.1	13.5	14.9
Jumping Rope (80 jumps/min)	8.7	10.2	11.9	13.5	15.0	16.6
Jumping Rope (90 jumps/min)	9.6	11.3	13.1	14.8	16.5	18.3
Jumping Rope (100 jumps/min)	10.4	12.3	14.3	16.2	18.1	19.9
Lying Down	1.1	1.3	1.5	1.7	1.9	2.1
Mopping or Sweeping Floor	2.9	3.4	3.9	4.4	4.9	5.5
Painting (indoors)	1.7	2.0	2.3	2.6	2.9	3.2
Painting (outdoors)	3.9	4.5	5.2	5.9	6.6	7.3
Running (11.5 min/mile)	6.8	8.0	9.2	10.5	11.7	12.9
Running (9.0 min/mile)	9.7	11.4	13.1	14.9	16.6	18.3
Running (8.0 min/mile)	10.8	12.5	14.2	16.0	17.7	19.4
Running (7.0 min/mile)	12.2	13.9	15.6	17.3	19.1	20.8
Running (6.0 min/mile)	13.9	15.6	17.3	19.0	20.7	22.5
Running (5.5 min/mile)	14.5	17.1	19.7	22.3	24.9	27.6
Sitting Quietly	1.1	1.2	1.4	1.6	1.8	2.0
Standing Quietly	1.4	1.6	1.8	2.1	2.3	2.6
Swimming (crawl, 20 yds/min)	3.5	4.2	4.8	5.5	6.2	6.9
Swimming (crawl, 55 yds/min)	9.7	11.4	13.1	14.8	15.9	18.5
Tennis (beginner singles)	3.5	4.2	4.8	5.5	6.2	6.9
Tennis (skilled singles)	7.8	9.2	10.6	12.1	13.5	14.9
Walking (17 min/mile pace)	3.2	3.8	4.4	4.9	5.5	6.1
Walking (13.5 min/mile pace)	5.3	6.2	7.2	8.2	9.1	10.1
Weight lifting (one set/2 min)	4.6	5.5	6.4	7.3	8.2	9.1

CHAPTER 7. AN EXERCISE PRESCRIPTION FOR LOSING BODY FAT, PART I

A low-fat diet combined with aerobic exercise and strength training will help you lose unwanted body fat, will help lower your cholesterol, will make you look better, feel better, work better, and, for good measure, live longer too. So let's look at the exercise part of this equation, and we'll see that it doesn't have to be a painful, odious experience.

Let's discuss a low to moderately intense exercise program specifically for people who want to lose body fat and weight. So, all you weight lifters, bodybuilders, and marathon runners out there (and, believe me, we do have plenty of highly physically fit people in the Coast Guard family), this information is not designed for you. You might find it interesting anyway, so keep reading.

Before you start an exercise program, especially if you've been a slothful couch-potato recently, you want to make sure you don't have any serious risks of heart disease or risks of injuring your bones, joints, muscles, tendons, and ligaments. So, it'd be a good idea to get a medical screening for these items to make sure it's safe for you to exercise. For active duty people, your periodic physical exam is good enough. And unless you have some combination of primary risk factors for heart disease (e.g., high blood pressure, cigarette smoking, high cholesterol, abnormal electrocardiogram, diabetes, problems with your heart valves, or a family history of heart disease prior to age 50), you can proceed. For nonactive duty personnel, it would be wise to consult a physician before starting your exercise program, especially if you have some of the risk factors I just mentioned.

Let's look at aerobic exercise first. The purpose of aerobic exercise in a weight-loss program is to burn up fat calories, increase your endurance, and make your heart and lungs more efficient. Primary aerobic exercises include walking, running, swimming, biking, rowing, stair-climbing, and aerobic dancing. The first thing you need to do is determine your current level of aerobic fitness. There are a lot of ways to do this, but a simple one is: See how far you can travel by running and/or walking in 12 minutes. For men under 40 years old, if you travel less than 1.4 miles in 12 minutes, you're in poor or very poor aerobic condition. If you can go more than 1.4 miles, you're in fair or better shape. For men 40 years and older, 1.25 miles in 12 minutes puts you into the poor or lower category, and more than this into the fair or better category. For women under 40 years old, 1.2 miles or less in 12 minutes means you're in the poor or very poor category, while more than this means you're in the fair or better level of aerobic fitness. For women 40 years and older, 1.1 miles or less in 12 minutes puts you in the poor category, while more than 1.1 miles means you're in the fair category or better. Now these are rough guidelines; more complex tables exist to make more accurate calculations (based on your precise age and the exact distance covered in 12 minutes), but this rough estimate is fine at this stage of your training.

After you determine your current level of aerobic fitness, the next thing to do is to determine your Target Heart Rate. Your target heart rate is how fast you want your heart to beat while you're doing your aerobic exercise. It depends on your age and how fit you are currently. The calculation of your target heart rate is based on your resting heart rate (which varies with your level of fitness--the slower the better) and your maximum possible heart rate, which varies with your age. Your resting heart rate is your heart rate after you've been sitting or lying quietly for at least five minutes. The most accurate time to measure it is when you first awake in the morning and are still lying in bed (and before you've had any coffee, or worse, a cigarette). Your maximum heart rate is calculated as follows: for men, maximum heart rate equal 205 minus half your age. For women, maximum heart rate equal 220 minus age. Here are two examples: Joe Sloth is 30 years old, wakes up one morning, takes his pulse and finds it to be 70. So, his resting heart rate equal 70, and his maximum heart rate equal 205 minus half(30) equal 205 minus 15 equal 190. Joe's wife Jane, who is 26, wakes up, takes her pulse and finds it to be 60. Her resting heart rate is 60, and her maximum heart rate is 220 minus 26 equal 194. So far so good. Now to calculate your target heart rate: (a) Subtract your resting heart rate from your maximum heart rate. (b) Multiply the result by 0.6, if you're currently in poor physical condition (from the results of your 12 minute run/walk), by 0.7 if you're in fair condition, or by 0.8 if you're already a super-jock or jockette. (c) Add your resting heart rate to the result and you have your Target Heart Rate.

Sounds complicated, doesn't it? But, it's really simple. Let's see the results for Joe and Jane Sloth. For Joe, subtracting his resting heart rate from his maximum heart rate gives 120. Since Joe really is a sloth, he has a poor aerobic capacity. Therefore, multiply 120 by 0.6 and you get 72. Add back his resting heart rate, and you get 72 plus 70 equal 142. So, Joe should start an aerobic exercise program that gets his heart rate to about 142 while he's exercising. His wife Jane, on the other hand, has occasionally attended aerobic dance classes, so she's in better shape, in the fair to good category of fitness. Therefore, subtract her resting heart rate from her maximum heart rate, multiply by 0.7, and add back her resting heart rate and you get the following: 194 minus 60 equal 134; 134 times 0.7 equal 94; 94 plus 60 equal 154. So, Jane should shoot for an exercise heart rate of 154.

Why are we doing all these calculations? Simply this, you want to perform aerobic exercise according to your current level of fitness, which will result in a gradual increase in your aerobic capacity. So here's the prescription:

If you're currently in poor shape, choose a form of aerobic exercise (walk, swim, cycle, etc.) and do it for 10-20 minutes, 3 times per week, and do it hard enough to achieve your target heart rate. As you get more fit and lose body-fat and weight,

you'll have to increase the intensity of your exercise to achieve your target heart rate. After three or four weeks, remeasure your resting heart rate and recalculate your target heart rate. You may even want to retest yourself on the 12-minute run to see if your aerobic fitness level has improved. You'll probably find that it has!

If you're currently in fair shape, choose a form of aerobic exercise and do it for 15-30 minutes 3 or 4 times per week. Follow the same advice in the paragraph above for increasing the intensity of your exercise and for recalculating your level of fitness and target heart rate. And if you're already in excellent shape, you don't need this advice, but keep doing whatever aerobic exercises that got you to your current level.

CHAPTER 8. AN EXERCISE PRESCRIPTION FOR LOSING BODY FAT, PART II

Aerobic exercise, as everyone knows, can help you lose weight and burn up unwanted body fat. Recent research shows that strength training (weight lifting) can help too. So, here's a little summary of the facts: (a) Weight lifting burns calories. (b) Weight lifting increases your muscle mass, which raises your metabolism and significantly increases the amount of calories you burn throughout the day (even when you're asleep--picture the headlines in the supermarket checkout-line newspaper: REVOLUTIONARY NEW TECHNIQUE BURNS CALORIES WHILE YOU SLEEP!). (c) After weight lifting, your metabolism is increased for up to an hour, helping you burn more calories. So, let's discuss an easy way to use strength-training to assist your fat-loss program. The following is intended for those of you who have little or no experience with strength training or weight lifting.

Don't be afraid of weight lifting. First of all, you don't have to pretend you're a weight-room pro by wearing a tank top and Lycra tights, hoisting heavy dumbbells around, making animal sounds while lifting three times your body weight, and sneaking preening looks at yourself in the weight-room mirror. (Now don't be insulted, all you weight lifters and bodybuilders out there. We all do those things, except, of course, for lifting three times our body weight!) You only have to lift a reasonable amount of weight to get good fat-loss results. Secondly, don't be afraid that weight lifting will make you bulky, increase your clothing size, or make you a candidate for the bodybuilding hall of fame. You can certainly achieve all these things, but only if you're prepared to spend a significant part of the next few years of your life in the gym. No, with the techniques discussed here, you'll increase your muscle mass enough to burn up fat calories, but your mirror won't show much change in your physique.

Let's learn a few basic definitions: (a) repetitions, or reps for short, is simply the number of times you lift a weight repeatedly without stopping; (b) sets is the number of times you do your reps (e.g., if you lift a weight 8 times, rest a minute, lift it again 8 times, rest, and lift it once more 8 times, then you've done 3 sets of 8 reps); (c) repetition maximum (RM) is the maximum amount of weight you can lift in a certain number of reps, one repetition maximum (or 1RM) is the maximum weight you can lift in one rep, three repetitions maximum (or 3RM) is the maximum weight you can lift for 3 reps (obviously it's harder to lift a weight 3 times in a row without stopping than to lift it once, so your 3RM will usually be less than your 1RM). Put another way, if you can barely bench press 100 pounds once, then 100 pounds is your 1RM on the bench press. But if you can bench press 90 pounds in 3 reps, barely making the third lift, then your 3RM is 90 pounds. Why am I telling you all this? Because, your strength-training prescription will be in terms of reps, sets, and RMs, so you need to know this stuff--besides, then you'll be able to talk like a regular gym rat.

Now your're ready for the gym. The first thing you need to do is warm-up. Never try weight lifting when your muscles are cold or you'll increase your risk of injury. Your warm-up routine should last at least five minutes. An easy way to warm up is through gentle calisthenics. For example, gently run in place for a few minutes while moving your arms up and down at your sides and in front of you. Hold your arms out to the side and perform circling movements. Raise yourself up and down on your toes. Perform a series of shallow knee bends. Alternatively, you can warm up by doing your strength-training exercises with very light weights (light enough so that there's no strain at all).

Next you want to perform some stretching exercises for a few minutes. There are many different stretches you can do, but be sure to include those that stretch your chest, shoulders, hips, and calves. Gently reach into each stretch, without inducing pain, until you can't stretch any further. Hold the stretch at that point for 5-10 seconds, then relax. Repeat this three times for each site. Now, you're ready to begin your lifting routine.

Here's the basic outline of a simple weight-lifting schedule where the primary goal is to increase your muscle mass and strength without necessarily building bulk. These exercises address most of the major muscle groups of your arms, trunk, and legs. The exercises will be: curl-ups (modified sit-ups), push-ups or modified push-ups, leg press or squats, bench press, shoulder press, arm curls, and heel raises. The following steps were developed by the Institute of Aerobic Fitness in Dallas, TX:

- a. Determine your 1RM (one repetition maximum) for each exercise (except for the curl-ups and push-ups, which don't usually have a 1RM, since you're using your own body weight for resistance).

- b. Determine 60 percent to 80 percent of the 1RM--this will be your training weight. If you've had experience with weights, you might want to use the 80 percent level; if you're a total novice, start with the 60 percent level.

- c. Perform one set of each exercise for 8-10 reps.

- d. Do this weight-lifting routine three times/week, alternating with your aerobic exercise program.

- e. After the second week of this schedule, increase to two sets for each exercise. After the third week, increase to three sets for each exercise and stay with three sets for the remainder of your training schedule.

- f. After the fourth week, recheck your 1RM. If it's gone up (which it probably has - after all, you've undoubtedly gotten stronger after a month of strength-training), recalculate your training weight (i.e., the 60-80 percent of your new 1RM), and perform three sets of each exercise at your new training weight.

At the end of every month, retest yourself and increase your training weight as necessary.

You can expect to make 3-5 percent gains in strength per week if you're a beginner. But as you get stronger, your weekly gains will get smaller. Also, you will probably be sore after your first few sessions. This will go away fairly quickly, but you may have to adjust your lifting routine according to your muscle soreness. If you're too sore to lift, don't - until it goes away.

CHAPTER 9. AN EXERCISE PRESCRIPTION FOR LOSING BODY FAT, PART III

You can use a simple weight-lifting routine to increase your muscle mass and strength (without building bulky muscles). Increasing your muscle mass will help you lose body fat both by burning calories during your strength-training exercise and, more importantly, by raising your resting metabolic rate. An outline of a seven-exercise routine, using curl-ups (modified sit-ups), leg press or squats, bench press, shoulder press, arm curls, and heel raises. Here's a more detailed description of these exercises. (Remember, these exercises are designed for people who have little or no weight-lifting experience--all you gym rats out there should know this stuff already!)

Curl-ups (sometimes fondly called "abdominal crunches"): This exercise trains your abdominal muscles, which will help protect you against low back pain and injury, as well as help "tighten" your belly. (It will not specifically take fat off your tummy, because there is no such thing as spot reducing.) Lie on your back on a firm surface with your knees bent at a 90 degree angle. Cross your arms in front of your chest and place your hands on your shoulders. Curl up (i.e., crunch your abdomen) by raising your head and shoulders until your elbows touch your thighs. Keep your feet on the floor and your hands on your shoulders at all times. If you can't raise all the way up, just go as far as you can. Your abdominal muscles benefit most during the first half of the curl-up anyway. Hold the curl position for a few seconds, then gently lie back down. Repeat this 8-10 times. After a few weeks of this, 8-10 reps will be too easy. You can either increase the number of reps, or add some weight to your curl-up. This is easy to do; simply hold the weight in your hands cross-armed under your chin (instead of placing your hands on your shoulders). If you have access to barbells or free-weights, try 2.5-5 pounds at first, and increase as necessary. You don't need "official" weights, however; a telephone book or other household object will do nicely.

Push-ups or modified push-ups: This classic exercise, familiar to nearly one and all, strengthens your shoulders, chest and the back of your arms. In addition, if you do it right, your back, abdomen, and thighs get an isometric workout too. There are many ways to do push-ups; the standard way is: Lie face down on a firm surface with your legs straight, toes on the surface, hands about shoulder width apart, palms flat and fingers pointed forward. Keeping your back straight, push yourself up until your arms are fully extended. Lower your body back down until your chest touches the deck, then push yourself back up again. Your arms, back, buttocks and legs should be straight from head to heels during the entire exercise. Some people aren't strong enough to do the classic push-up at first. To make it easier, perform a modified push-up by keeping your knees on the ground. Even here you should strive to keep your back straight. Another form of modified push-up is the elevated push-up. Here you use a chair,

footstool, table, or sturdy box to lean against while you perform the push-up. The technique is the same as for the standard push-up, except the higher the object the easier the exercise. Whatever form of push-up you use, choose one that you can do for 8-10 reps per set. When this becomes too easy, increase the number of reps or switch from modified to regular push-ups.

The remaining five exercises require weights, so we need to review how to select the right amount of weight. Your 1RM is simply the maximum amount of weight you can lift once. To find your 1RM, start with a light weight you know you can lift and gradually increase the weight until you find a level you can only lift once. In the bench press and leg press exercises, men should start with about 2/3 your body weight and gradually increase until you find your 1RM. For women, start with one or two weight plates on the leg press or bench press weight machine and gradually increase the weight until you find your 1RM. Having found your 1RM, your correct lifting weight is 60-80 percent of 1RM--and you want to lift it 8-10 times.

Leg Press or Squat: These exercises strengthen the muscles of your thighs and the muscles in your buttocks. To do the leg press, you need a gymnasium or weight room that has a leg press machine. Adjust the seat so that when your legs are on the pedals, your knees are bent at a 90 degree angle. Grasp the handles on the seat and press your feet forward to lift the weight. Slowly lower the weight. Exhale when you lift the weight and inhale when you lower the weight. If you can't locate a leg press machine, you can perform a squat to achieve a similar effect. Stand with your feet comfortably spread. Hold the correct amount of weight in an overhand grip behind your neck, resting on your shoulders. Bend your knees to a 90 degree, sitting position (don't go any lower). Stand up slowly. Inhale as you go down, and exhale as you stand back up.

Bench Press: This exercise, like push-ups, strengthens your chest, back of your arms, and chest. Ideally, a bench press is best performed on gymnasium equipment, but you can improvise if such is unavailable. Lie flat on your back with your feet on the floor. Grip the bench-press bar at shoulder width or slightly wider. Press the bar up while exhaling. Slowly lower it back down while inhaling. Make sure you keep your back flat on the bench while lifting the weight.

Shoulder Press: This exercise trains the muscles on your shoulders and back of your arms. A weight machine is again useful, but improvisation will work fine as well. Stand or sit erect with your feet comfortably apart. Grasp the shoulder bar with an overhand grip. Raise the weight over your head until your arms are fully extended, straight up. Slowly lower the weight back down. Exhale as you raise the weight, inhale while lowering it.

Arm Curls: This exercise strengthens the muscles on the front of your arms, and it strengthens your grip as well. Stand erect

with your knees slightly bent, feet at shoulder width. Hold the weight with an underhand grip, hands about shoulder width apart, arms fully extended in front of you. Bring the weight in an arc (hence the name curl) towards your chest. Lower the weight slowly back down. Make sure you keep your elbows close to your sides, and especially make sure you keep your back straight. Do not lean backward or you may injure your back. Exhale while curling the weight, and inhale when lowering it back down.

Heel Raise: This exercise trains the muscles of your calves. This exercise is simplicity itself. Stand erect and raise your heels off the floor as high as possible, standing on your toes. Like the curl-ups, you can make this exercise more difficult by holding weights in your hands while doing the heel raise. Alternatively, you can put a one or two inch-thick book, board or other firm object under your toes when doing the lift, effectively making your calves raise you that much higher.

Perform one set of each of these exercises for 8-10 reps. Do this three times/week, alternating with your aerobic exercise program. After the second week, increase to 2 sets of 8-10 reps. After three weeks, increase to three sets. Maintain three sets for the remainder of your training period. After the fourth week, recheck your 1RM and recalculate the 60-80 percent value. You'll find it's gone up, because you're now stronger! Recheck your 1RM every month and increase your training weight as necessary.

CHAPTER 10. SUMMARY

If you adhere to these principles, you will surely shave both pounds and inches of fat from your abdomen, hips, and buttocks (referred to in formal medical terms as tummy, hips, and bottom).

a. Your primary objective is to lose body fat, not simply body weight. You specifically should not want to lose muscle tissue, since the more muscle you have, the higher your metabolic rate and the faster you can burn up excess fat from your body.

b. Measure your success by what you see in the mirror and by the size of your clothes rather than by what your bathroom scale shows. Daily, or even weekly, changes in weight are mainly changes in the amount of water in your body. Losing fat takes time.

c. Have patience. Lose about one pound (of fat, not water) per week as your goal. Losing weight faster than that is not recommended and may be counterproductive. Rapid gains and losses in weight, the so-called "yo-yo" diet syndrome, is bad for your metabolism. It slows it down, which is the opposite of what you want to achieve by losing body fat.

d. Do not go on a fad diet. They are unnecessary, expensive, do not produce long-term success, most do not teach healthy eating habits, require you to eat or do odd things, or to buy frivolous food supplements, and generally don't work. The rapid weight loss sometimes seen with these diets is almost entirely due to water loss, not fat loss. As soon as you abandon the diet and go back to your old eating habits, you will regain all the lost weight.

e. Know what you eat--read food labels. Understand the fallacies in food advertising, designed to get you to buy the product by promising healthy eating. Frequently the advertising is misleading. If you understand and are careful about what you eat, you will have no problem getting rid of unwanted body fat.

f. Limit the fat in your diet. This one change in your eating habits will be the most effective in helping you lose body fat. If you can decrease the percentage of fat calories in your diet to under 25 percent, you will automatically lose fat from your body without the need for special diets, magic foods, rubber suits, or starvation regimens.

g. Know how to calculate the percentage of fat calories in your food. Fat has 9 calories per gram of food. From the food label, find the number of grams of fat per serving, multiply by 9, and divide by the total calories per serving. The result is the fraction of fat calories per serving. Multiply by 100 percent to get the percentage of fat calories per serving.

h. Know which foods are high in fat and avoid them (e.g., fried foods). Avoid using fat as a spice (i.e., adding it to

foods to change the taste or texture). The most common fat-as-a-spice foods are: butter, margarine, mayonnaise, sour cream, and cream cheese. All of these are 90-100 percent fat. Other common high-fat foods are: bacon, sausage, cheese, nuts, peanut-butter, whole milk, egg yolks, coconut, bologna, salami, deli meats, steak, olives, chips, doughnuts, and ice cream.

i. Use low-fat or no-fat foods as a substitute for high-fat foods. Many brands of no-fat ice cream are available, as are no-fat salad dressings, pastries, mayonnaise, and even cheese.

j. Eat more fruits, vegetables, and whole grain breads and rolls. These foods are all virtually fat-free; they also provide fiber, and essential vitamins and minerals.

k. Avoid fast food restaurants, unless they offer a salad bar or low-fat main entree items. Watch out for salad dressings - each tablespoon has 100 calories, nearly all of it fat. Go for the low-fat or no-fat dressings. Also at the salad bar, watch out for the cheese and prepared salads made with mayonnaise (e.g., pasta salads, potato salad, tuna salad, chicken salad, deviled ham, etc.).

l. Perform some type of aerobic exercise at least three times per week. Aerobic exercises include walking, jogging, running, swimming, cycling, stair-climbing, rowing, skiing, jumping rope, and aerobic dancing. Aerobic exercises not only burn fat calories, they get you in shape!

m. Perform strength-training exercises three times per week. Strength-training with weights will increase your muscle mass and increase your metabolic rate, helping you burn excess fat calories. You will not achieve a noticeable increase in the size of your muscles, unless you spend 1-2 hours per day over months and years lifting weights. Weight lifting is a relatively new recommendation for people trying to lose body fat. Research shows its effectiveness.

If you adhere to these principles, many good results will follow: you'll lose fat, you'll lose inches from your waist, butt and hips, you'll look better in the mirror, you'll be able to fit into smaller clothes, you'll feel better, your cholesterol will come down, you'll be more physically fit, you'll have more energy, and you'll probably live longer too. That's a lot of benefit from a few simple changes in your life style. It's time to get started!

U.S. Department
of Transportation

**United States
Coast Guard**

2100 Second St., S.W.
Washington, D.C. 20593

Official Business
Penalty for Private Use \$300